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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,246	10/17/2005	Shin Muto	03500.018122	6986

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EXAMINER
HUSSAIN, IMAD

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/553,246	MUTO, SHIN
	Examiner	Art Unit	
	Imad Hussain	2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *10/17/2005*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1.   Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/JP04/06610, filed on 05/11/2004.

Specification

2.   The disclosure is objected to because of the following informalities: the term "Personal Data Assist<u>ance</u>" on page 1, line 25 should read "Personal Data Assist<u>ant</u>".

Appropriate correction is required.

3.   The disclosure is objected to because of the following informalities: the word "television" on page 2, line 2 should be preceded by the preposition "a".

Appropriate correction is required.

4.   The disclosure is objected to because of the following informalities: the example multicast IP addresses provided (e.g., page 13, line 2) are invalid. Multicast IP addresses should be written in dotted decimal format with each of the four segments having values between 0 and 255.

Appropriate correction.is required.

5.   The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors such as the above. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

6.   Claim 1 is objected to because of the following informalities: the word "for" should be inserted after "reception means" in the third paragraph. Appropriate correction is required.

7.   Claim 21 is objected to because of the following informalities: the phrase "sleep mode refers to a mode to which" should read "sleep mode refers to a mode in which". Appropriate correction is required.

8.   Claims 3, 7 and 8 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 3, 7 and 15 recite the limitation "the multicast address" in the first paragraph but the claims on which they depend do not mention a multicast address.

9.   Claims 4 and 8 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 4 and 8 recite the limitation "the search request packet" in the first paragraph but the claims on which they depend do not mention a search request packet.

10.   Claims 4, 8, 12 and 16 recite the limitation "StandbyQuery instruction". This clause may be interpreted as any instruction. For the purposes of examination, the above-mentioned claimed clause will be interpreted as "instruction."

Claim Rejections - 35 USC § 112

11.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12.   Claims 3, 7, 11, 15 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13.   Claims 3, 7, 11 and 15 recite the limitation "the multicast address... can be determined based on a peripheral device environment". This clause may be interpreted as the multicast address being determined on this basis or the multicast address not being determined on this basis. For the purposes of examination the above-mentioned claimed clause will be interpreted as "the multicast address is determined based on the subnet identification for the peripheral device".

14.   Claims 3, 7, 11 and 15 recite the limitation "a multicast address... in a sleep status can be different from a multicast address... in a normal status." This clause may be interpreted as the first multicast address being different from the second multicast address or the first multicast address being the same as the second multicast address. For the purposes of examination, the above-mentioned claimed clause will be interpreted as "the multicast address in a sleep status is not different from a multicast address in a normal status."

15.   Claim 21 recites the limitation "power is not supplied to a status management unit... from which a LAN controller can receive a status." This clause may be interpreted

as referring to a state wherein the LAN controller does not receive status information or a state wherein a particular status management unit that could possibly communicate with the LAN controller is not supplied power. For the purposes of examination, the above-mentioned claimed clause will be interpreted as referring to "a state wherein a particular status management unit that could possibly communicate with the LAN controller is not supplied power."

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. Claims 1, 9, 17, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kevin A. Cone (US 5915119, hereafter Cone) in further view of Takashi Okazawa (US 6459496, hereafter Okazawa).

Regarding claim 1, Cone teaches a peripheral device which can communicate with a plurality of client devices connected to a network, comprising:

reception means ["network adapter", Cone, Figure 2 (218)] for receiving a sleep ["suspend"] release request ["magic packet"] from the proxy response server ["proxy terminal"] based on a network packet indicating a peripheral device discovery request ["management request packet"] for a peripheral device which is changing to a predetermined sleep mode issued by any client device ["network management station"]

connected to the network after the proxy response server receives the sleep mode

transition request from the peripheral device (Cone, column 4, line 61-column 5, line

30); and

control means ["network adapter", Cone, Figure 2 (218)] for releasing the sleep

mode and returning to a data processing wait status when said reception means

receives the sleep release request ["out of suspend in response to the magic packet",

Cone, column 5, lines 33-36].

Cone does not explicitly disclose notification means for notifying a proxy

response server connectable to the network of a sleep mode transition request when

the peripheral device changes from a normal data processing wait status to a sleep

mode. However, Okazawa teaches that the peripheral device has a notification means

["IOP", Okazawa, Figure 1 (111)] for informing the proxy response server of the

peripheral device's status (Okazawa, column 5, lines 16-23).

Cone and Okazawa are analogous subject matter in the same field of endeavor

as both cover host devices for networked peripherals. One of ordinary skill in the art at

the time the invention was made would have been motivated to modify the power-

saving-setting host taught in Cone with the power-saving-monitoring host taught in

Okazawa because doing so would allow for a greater power-savings effect (Okazawa,

column 1, lines 40-47). Therefore, the claimed invention as a whole would have been

"*prima facie* obvious" to one of ordinary skill in the art at the time the invention was

made.

Regarding claim 9, Cone teaches a client device which can communicate with a plurality

of peripheral devices or server devices connected over a network, comprising:

issue means ["network adapter", Cone, Figure 2 (218)] for issuing a network

packet indicating a specific peripheral device discovery request for discovery of a

peripheral device during transition to sleep status based on a response result from a

network for a request to retrieve a peripheral device in a normal status (Cone, column 4,

lines 61-64); and

reception means ["network adapter", Cone, Figure 2 (218)] for receiving a return

response from any peripheral device notified of a sleep release request by said server

device after the peripheral device discovery request has issued by said issue means

(Cone, column 5, lines 31-32).

Cone does not explicitly disclose data processing means for transmitting a

predetermined data processing request to a specific peripheral device whose sleep

mode has been released after said reception means has received the return response.

However, Okazawa teaches a device ["interface section", Okazawa, column 2, lines 19-

21] that transmits printing data to a specific peripheral device after it is awoken by a

printing request command (Okazawa, column 11, lines 34-39).

Cone and Okazawa are analogous subject matter in the same field of endeavor

as both cover host devices for networked peripherals. One of ordinary skill in the art at

the time the invention was made would have been motivated to modify the power-

saving-setting host taught in Cone with the power-saving-monitoring host taught in

Okazawa because doing so would allow for a greater power-savings effect (Okazawa,

column 1, lines 40-47). Therefore, the claimed invention as a whole would have been "*prima facie* obvious" to one of ordinary skill in the art at the time the invention was made.

Regarding claim 17, the claim comprises the same limitations as claim 1. The same rationale for rejection is applicable.

Regarding claim 19, the claim comprises the same limitations as claim 9. The same rationale for rejection is applicable.

Regarding claim 21, Okazawa teaches that the sleep mode refers to a mode to which power is not supplied to a status management unit of a printer controller from which a LAN controller can receive a status (Okazawa, column 2, lines 39-45).

18.   Claims 5, 13, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cone in view of Okazawa and in further view of Levine et al (US 6020973, hereafter Levine).

Regarding claim 5, Cone teaches a server device proxy for a peripheral device which can communicate with a plurality of client devices connected to a network, comprising:

        notification means [Cone, Figure 2 (218), network adapter] for notifying a sleeping peripheral device whose sleep release request has been registered for release

of a sleep mode to a peripheral device retrieved by said discovery means (Cone,

column 5, lines 28-30).

Cone does not explicitly disclose:

registration means for receiving and registering a sleep transition request

announced from a peripheral device in the network when the peripheral device changes

from a normal data processing wait status to a sleep mode; and

discovery means for retrieving a peripheral device in a sleep status depending on

a network packet indicating a specific peripheral device discovery request for discovery

of a sleeping peripheral device issued from any client device connected to the network

after registration by said registration means

However, Okazawa teaches a host apparatus for a plurality of printers with

reception means ["interface section", Okazawa, column 2, lines 19-21] for a sleep

transition request announced from a peripheral device in the network (Okazawa,

abstract). Levine teaches a method for registering peripheral status in a proxy server

database (Levine, column 10, lines 38-42) and retrieving that information from the

database in response to a client request (Levine, column 18, lines 3-11).

Cone, Okazawa and Levine are analogous subject matter in the same field of

endeavor as all three cover host devices for networked peripherals. One of ordinary skill

in the art at the time the invention was made would have been motivated to modify the

power-saving-setting host taught in Cone with the power-saving-monitoring host taught

in Okazawa because doing so would allow for a greater power-savings effect

(Okazawa, column 1, lines 40-47) and further with the caching database taught by

Levine because doing so would minimize the amount of time required to obtain

information requested by clients (Levine, column 18, lines 3-11). Therefore, the claimed

invention as a whole would have been "*prima facie* obvious" to one of ordinary skill in

the art at the time the invention was made.

Regarding claim 13, the claim comprises the same limitations as claims 1, 5 and 9. The

same rationale for rejection is applicable.

Regarding claim 18, the claim comprises the same limitations as claim 5. The same

rationale for rejection is applicable.

Regarding claim 20, the claim comprises the same limitations as claim 13. The same

rationale for rejection is applicable.

19.   Claims 2, 3, 4, and 11 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Cone and Okazawa and in further view of Oppenheimer et al (US

5282270, hereafter Oppenheimer).

Regarding claim 2, Cone and Okazawa do not explicitly disclose that that the network

packet which is the peripheral device discovery request is a search request packet for a

multicast address set as a predetermined network address for a plurality of peripheral

devices.

However, Oppenheimer teaches that the network packet which is the peripheral device discovery request is a search request packet for a multicast address set as a predetermined network address for a plurality of peripheral devices (Oppenheimer, abstract and Figure 16). Cone, Okazawa and Oppenheimer are analogous subject matter in the same field of endeavor as all three cover host devices for networked peripherals. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the power-saving-setting host taught in Cone with the power-saving-monitoring host taught in Okazawa because doing so would allow for a greater power-savings effect (Okazawa, column 1, lines 40-47) and further with the environment-determined multicast addressing taught by Oppenheimer because doing so would allow for communication with a plurality of devices (Oppenheimer, column 1, lines 15-18). Therefore, the claimed invention as a whole would have been "*prima facie* obvious" to one of ordinary skill in the art at the time the invention was made.

Regarding claim 3, Oppenheimer teaches the multicast address is a uniquely determined address, and can be determined based on a peripheral device environment (Oppenheimer, column 2, lines 23-27).

Cone, Okazawa and Oppenheimer are analogous subject matter in the same field of endeavor as all three cover host devices for networked peripherals. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the power-saving-setting host taught in Cone with the power-saving-monitoring host taught in Okazawa because doing so would allow for a greater power-

savings effect (Okazawa, column 1, lines 40-47) and further with the environment-determined multicast addressing taught by Oppenheimer because doing so would allow for communication with a plurality of devices (Oppenheimer, column 1, lines 15-18). Therefore, the claimed invention as a whole would have been "*prima facie* obvious" to one of ordinary skill in the art at the time the invention was made.

Regarding claim 4, Cone teaches that the search request packet ["management request packet"] targets a sleeping device ["a particular user terminal from suspend mode"] (Cone, column 5, lines 7-10).

Cone does not explicitly disclose that the packet includes an instruction indicating a discovery request. However, Oppenheimer teaches that the network packet which is the peripheral device discovery request is a search request packet (Oppenheimer, abstract and Figure 16). Cone, Okazawa and Oppenheimer are analogous subject matter in the same field of endeavor as all three cover host devices for networked peripherals. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the power-saving-setting host taught in Cone with the power-saving-monitoring host taught in Okazawa because doing so would allow for a greater power-savings effect (Okazawa, column 1, lines 40-47) and further with the environment-determined multicast addressing taught by Oppenheimer because doing so would allow for discovery and communication with a plurality of devices (Oppenheimer, abstract and column 1, lines 15-18). Therefore, the claimed invention as

a whole would have been *"prima facie* obvious" to one of ordinary skill in the art at the time the invention was made.

Regarding claim 11, the claim comprises the same limitations as claims 3 and 10. The same rationale for rejection is applicable.

20.   Claims 6, 7, 8, 10, 12, 14, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cone and Okazawa in view of Levine and in further view of Oppenheimer.

Regarding claim 6, the claim comprises the same limitations as claims 2 and 5. The same rationale for rejection is applicable.

Regarding claim 7, the claim comprises the same limitations as claims 3 and 6. The same rationale for rejection is applicable.

Regarding claim 8, the claim comprises the same limitations as claims 4 and 5. The same rationale for rejection is applicable.

Regarding claim 10, the claim comprises the same limitations as claims 2 and 5. The same rationale for rejection is applicable.

Regarding claim 12, the claim comprises the same limitations as claims 4 and 10. The

same rationale for rejection is applicable.

Regarding claim 14, the claim comprises the same limitations as claims 2 and 13. The

same rationale for rejection is applicable.

Regarding claim 15, the claim comprises the same limitations as claims 3 and 13. The

same rationale for rejection is applicable.

Regarding claim 16, the claim comprises the same limitations as claims 4 and 14. The

same rationale for rejection is applicable.

Conclusion

21.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

   a.   Carney et al. *Method, system, and program for transmitting notification to*

   an input/output device US 20030018829 A1 (Describes a system for waking a

   peripheral from sleep status by means of an early warning message.)

   b.   Cheshire, Stuart D. *Method and apparatus for implementing a sleep proxy*

   for services on a network US 7107442 B2 (Describes a sleep proxy responder for

   network devices and services.)

c.   Ferlitsch et al. *Scan to cluster print structure and methodology* US

20040061909 A1 (Describes a method to find printers on a network via a

broadcast message.)

d.   Lynch et al. *Method and apparatus for selecting a responder to enable*

reliable multicast US 20040184427 A1 (Describes a proxy responder for

multicast queries.)

e.   Roy et al. *System for network device location* US 20020188759 A1

(Describes a multicast device discovery system.)

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Imad Hussain whose telephone number is 571-270-

3628. The examiner can normally be reached Monday through Thursday from 0730 to
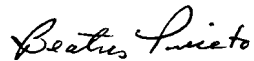
1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Beatriz Prieto can be reached on 571-272-3902. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Imad Hussain

BEATRIZ PRIETO
SUPERVISORY PATENT EXAMINE: